



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,075	03/08/2001	John M. Verbil	1828 USW 0624 PUS	5333

22193 7590 12/17/2004

QWEST COMMUNICATIONS INTERNATIONAL INC  
LAW DEPT INTELLECTUAL PROPERTY GROUP  
1801 CALIFORNIA STREET, SUITE 3800  
DENVER, CO 80202

EXAMINER

NGUYEN, QUYNH H

ART UNIT PAPER NUMBER

2642

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/802,075	<b>Applicant(s)</b> VERBIL ET AL.	
	<b>Examiner</b> Quynh H Nguyen	<b>Art Unit</b> 2642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/9/01</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 24, and 35 recite placing a second call indicating status of the queued subscriber line. It is unclear as to whom a second call providing status information is sent.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, 10, 13, 21, 24, 32, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Meubus et al. (U.S. Patent 6,212,261).

Regarding claim 1, Meubus et al. teach a method of call queuing notification implemented in a telecommunication advanced intelligent network comprising: receiving a call to access a subscriber line (col. 1, lines 31-33); determining that the subscriber line is busy (col. 2, lines 27-30 - "...while a called station is engaged in a data call"); placing the caller in a queue implemented within the telecommunications network (col. 2, lines 1-3); and placing a separate call indicating status of the queued subscriber's line

Art Unit: 2642

(col. 2, lines 31-32 - "... providing a message indicative of an incoming call to the called station via the data call").

Regarding claim 4, Meubus et al. teach the queue is maintained in an intelligent peripheral (col. 2, lines 1-3 - Gateway agent GA[19] at switching system).

Regarding claims 10, 21, and 32, Meubus et al. teach the separate call is placed when the call to the subscriber is queued (col. 2, lines 1-6).

Claims 13 and 24 are rejected for the same reasons as discussed above with respect to claim 1. Furthermore, Meubus et al. teach a service control point (SCP) and central office switch / switches (col. 6, lines 42-47), an intelligent peripheral (Fig. 1, GA19).

Claim 35 is rejected for the same reason as discussed above with respect to claim 24. Furthermore, Meubus et al. teach an AIN equipped with TAT capability (col. 6, line 53); monitoring signaling to detect TAT trigger and generating a first electrical signal for receipt by the SCP in response to the detected TAT trigger (col. 6, lines 51-55 and col. 7, lines 59-67); generating a second electrical signal requesting status of a queue associated with the subscriber line (col. 6, line 55 through col. 7, line 43).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2642

6. Claims 1-3, 5-8, 14-19, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miner et al. (U.S. Patent 5,652,789) in view of Meubus et al. (U.S. Patent 6,212,261).

Regarding claim 1, Miner et al. teach the steps of: receiving a call to access a subscriber line (col. 3, lines 6-7); determining that the subscriber line is busy (col. 3, lines 11-13 - "detecting that the subscriber line is presently interacting with the electronic assistant"); placing the caller in a queue implemented within the telecommunications network (col. 8, lines 36-39); and placing a separate call indicating status of the queued subscriber's line (col. 3, lines 13-15). However, Miner et al. do not teach the call queuing notification implemented in a telecommunications advanced intelligent network (AIN).

Meubus et al. teach a method of providing an indication of an incoming call to a called station (col. 1, lines 31-33) in the signaling System # 7 and data communication capabilities (col. 3, lines 36-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of receiving a call to access a subscriber line; determining that the subscriber line is busy; placing the caller in a queue implemented within the telecommunications network; and placing a separate call indicating status of the queued subscriber's line, as taught by Miner, in an advanced intelligent network environment in order to have an enhanced signaling and data communication capabilities to provide the called party with incoming call information.

Art Unit: 2642

Regarding claims 2 and 14, Miner et al. teach notifying the subscriber before placing the separate call indicating the subscriber's line status (col. 8, lines 3-63).

Regarding claim 3, Miner et al. teach placing the separate call indicating the status of subscriber's line based on information about the received call (col. 8, lines 10-24). For example, if the caller has high priority or normal priority.

Regarding claims 5, 16, and 27, Miner et al. teach providing caller identification information to the subscriber (col. 33, lines 5-28).

Regarding claims 6, 17, and 28, Miner et al. teach the electronic assistant communicate with the subscriber using paging system (col. 2, lines 14-19).

Regarding claims 7, 18, and 29, Miner et al. teach receiving at least one command from the subscriber in response to placing the separate call indicating queued subscriber line access call status (col. 2, lines 34-36).

Regarding claims 8, 19, and 30, Miner et al. teach a method of call queuing notification wherein the command to connects the queued call to the subscriber over a line used to place the separate call (col. 2, lines 36-37).

Regarding claim 15, Miner et al. teach a system for call queue notification wherein the IP places the second call based on information about at least one queued call (col. 3, lines 15-16).

7. Claims 9, 11-12, 20, 22-23, 31, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miner et al. (U.S. Patent 5,652,789) in view of Meubus et al. (U.S. Patent 6,212,261) and further in view of Ginsberg (U.S. Patent 6,064,730).

Art Unit: 2642

Regarding claims 9, 20, and 31, Meubus et al. do not teach moving the queued call to the front of the queue.

Ginsberg teaches moving / routing the queued call to the next available agent when it is at the front of the queue (col. 1, lines 28-34).

There are different methods of handling incoming calls in a call center, enabling a caller to have his or her interests better served are desirable. For example, moving a call in the queue according its priority or simply just routing the call in the front of the queue to the next available agent. The latter one is the prefer one in the instant application.

Regarding claims 11, 22, and 33, Ginsberg teaches a length of time that the call to the subscriber is queued (col. 2, line11).

Regarding claims 12, 23, and 34, Ginsberg teaches a number of calls queued (col. 2, lines col. 2, lines 60-61 - how long the agent's queue is).

8. Claims 25 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meubus et al. (U.S. Patent 6,212,261) in view of Kilander et al. (U.S. Patent 5,742,675).

Claims 25 and 37 are rejected for the same reasons as discussed above with respect to claim 24. However, Meubus et al. do not teach setting a monitor on the subscriber line and notifying the SCP when the line is idle, responding to the call being answered by the subscriber, connecting the subscriber and the caller.

Kilander et al. teach (Fig. 3) that while the call is queued, the CCS 20 monitoring an agent and gathering services, once the agent is available / idle, signal the CCS and route the caller to the agent (col. 6, lines 33-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of monitoring an agent and gathering services, once the agent is available / idle, signal the CCS and route the caller to the agent, as taught by Kilander, in Meubus's system in order to permit the subscriber to indicate his or her availability to handle incoming calls efficiently and to avoid caller from hanging up the phone for waiting too long.

9. Claims 26 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meubus et al. (U.S. Patent 6,212,261) in view of Kilander et al. (U.S. Patent 5,742,675) and further in view of Meek et al. (U.S. Patent 5,982,859).

Claim 36 is rejected for the same reasons discussed in claim 37. However, Meubus et al. do not teach setting a Next Even List to determine the status of the subscriber line in response to a determination that the queue is empty.

Meek et al. teach the SCP determines the destination condition such as busy or no answer by sending an Analyze Route Message including a Next Event List to the destination SSP (col. 6, lines 17-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of determining the destination condition such as busy or no answer by sending an Analyze Route Message including a Next



Art Unit: 2642

Event List to the destination SSP, as taught by Meek, in Meubus's system in order to sufficient handling incoming calls and maximum utilizing agents.

Claim 26 is rejected for the same reasons as discussed with respect to claims 35 and 36.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 703-305-5451. The examiner can normally be reached on Monday - Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

qhn

Quynh H. Nguyen  
December 13, 2004

  
AHMAD F. MATAR  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700